



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/514,200	11/12/2004	Hanna Brummack	033300-011	2532
21839	7590	10/19/2007	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC			CHEN, WEN YING PATTY	
POST OFFICE BOX 1404				
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			2871	
			NOTIFICATION DATE	DELIVERY MODE
			10/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
debra.hawkins@bipc.com

Office Action Summary	Application No.	Applicant(s)
	10/514,200	BRUMMACK ET AL.
	Examiner	Art Unit
	W. Patty Chen	2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 July 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 14-34 is/are pending in the application.
- 4a) Of the above claim(s) 23-34 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 14 and 20-22 is/are rejected.
- 7) Claim(s) 15-19 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 12 November 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/12/04, 4/16/07</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Group 1 in the reply filed on Jul. 10, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Therefore, claims 14-34 remain pending in the current application, however, claims 23-34 are withdrawn from consideration.

Claim Objections

Claims 15-19 are objected to because of the following informalities: Claims 15-19 lacks antecedent basis, wherein the limitations of "the liquid crystal display" is not introduced in the previous claims. For purpose of Examination, the examiner will treat the limitation of "the liquid crystal display" as "the liquid crystal" so as to comply with the limitations set forth in claim 14. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14, 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyoshi (JP 11-015396; submitted IDS).

With respect to claim 14: Miyoshi discloses in Figure 1 a solar-powered liquid crystal display device, comprising:
a solar structure including:
an at least partially transparent first carrier (element 1), and
a solar cell arrangement carried by the first carrier and comprising, in stacked relationship:
an at least partially transparent first contact (element 6; Paragraph 0015),
a photovoltaically active layer (element 7), and
a second contact (element 11) disposed on a side of the photovoltaically active layer opposite that of the first contact; and

a liquid crystal display carried by the first carrier and comprising:
a first polarizer (element 2),
a liquid crystal (element 4),
a transparent third contact (element 6) disposed on a side of the liquid crystal opposite that of the first contact (as shown),
a transparent second carrier (element 1),
a second polarizer (element 2), and
a reflector (element 3).

As to claim 20: Miyoshi further disclose in Figure 1 that the first carrier (element 1) includes front and rear sides; and wherein the solar cell arrangement, the first contact, the liquid

crystal, the second contact, the second carrier, the second polarizer, and the reflector are carried on the rear side of the first carrier, and the first polarizer (element 2) is carried on the front side of the first carrier (as shown in the figure).

As to claim 22: Miyoshi further disclose in Figure 1 that the first polarizer (element 2) is seated on the first carrier (element 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi (JP 11-015396; submitted IDS) in view of Sekiguchi et al. (US 2002/0109808).

Miyoshi disclosed all of the limitations set forth in claim 14 and further disclose in Paragraph 0036 that the device can be used as time-displaying devices, but Miyoshi failed to specifically disclose that the first carrier is a timepiece dial face.

However, Sekiguchi et al. disclose in Figure 7 that the first carrier (element 33) of a solar-powered liquid crystal display device is used as a timepiece dial face.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a solar-powered liquid crystal display device as taught by Miyoshi wherein the first carrier of the display device is used as a timepiece dial face as taught by Sekiguchi et al., since by using the first carrier of the display device as a dial face allows the analog displaying of time in a timepiece.

Allowable Subject Matter

Claims 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 15: Miyoshi discloses all of the limitations set forth in the previous claims and further disclose in Figure 3 that the solar cell arrangement includes an internal space formed therein (the regions where element 7 is not formed).

However, Miyoshi either alone or in combination failed to teach or suggest that the liquid crystal is aligned with the internal space, since in Figure 1 of Miyoshi, the liquid crystal (element 4) is formed of a different shape in relations to the opening.

Therefore, claim 15 is deemed non-obvious and inventive over the prior arts, thus is allowable.

As to claims 16-19: since claims 16-19 depend either directly or indirectly on the allowable claim 15, thus are also allowable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen
Examiner
Art Unit 2871

WPC
10/12/07


ANDREW SCHECHTER
PRIMARY EXAMINER